Beaconhouse School System

Canal Side Campus-Boys

P1 Resource Sheet

1 a) Evaluate: $12 - 6 \div 3 + 4$

Answer ……………………………….[1]

b) Evaluate 0.3×1.5

Answer ………………………………. [1]

c) Evaluate $\frac{2}{3} - \frac{5}{8}$

Answer ………………………………. [1]

d) Evaluate $\frac{1}{3} \div \frac{7}{9}$, **give your answer as a fraction in its lowest terms.**

Answer ………………………………. [1]

2 a) An air craft leaves at 22 35 on a flight that takes 3hours and 50 minutes. Find the time when the air craft arrives.

Answer ………………………………. [1]

b) The air craft flies a distance of 3200Km, correct to the nearest 100km. write down the lower bound for distance.

Answer ………………………………. [1]

3 a) A bottle full of liquid has a total mass of 1.27Kg. When the bottle is half-full of liquid the total mass is 900grams. Calculate the mass of bottle.

Answer **………………………………. [1]**

b) Stella walks to a park. For 4 minutes she walks at a rate of 80 steps per minute. For 1 minute she walks a rate of 120 steps per minute. Find the mean number of steps per minute she takes.

Answer **………………………………. [2]**

4 a) Write the number $\mathbf{0.034 \times 10^{-3}}$ in standard form.

Answer **………………………………. [1]**

b) Arrange $\mathbf{0.034 \times 10^{-3}}$, $\mathbf{33.7 \times 10^{-6}}$ and $\mathbf{4.2 \times 10^{-5}}$ in order, starting with the smallest.

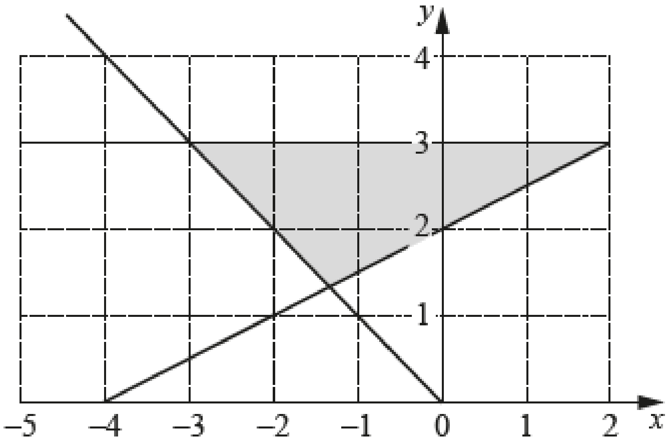
Answer **……………………………., ………………………., …………………………… [1]**

5 a) By writing each number correct to 1 significant figure, estimate the value of

$$\mathbf{\frac{29.2 \times 8.17}{0.396}}$$

Answer **………………………………. [2]**

b)



The shaded region in the diagram is defined by three inequalities.

One of these is $y \geq \frac{1}{2}x + 2$. Write down the other two inequalities.

Answer **……………………………….. [1]**

Answer **……………………………….. [1]**

6 a) Factories completely $3xy - 20 + 5x - 12y$

Answer **……………………………….. [2]**

b) Express 500 as the product of its prime factors.

Answer **……………………………….. [1]**

7 a) Solve the simultaneous equations $3x = 4y$

$$1 + 5x = 6y$$

***Answer* x= ……………………………… [1]**

***Y=*……………………………… [1]**

b) $M = 2 \times 3^2$ $\quad N = 2^4 \times 3^2$

Find the values of p **and** q

i. $M \times N = 2^p \times 3^q$

Answer **………………………………… [1]**

ii. $M \div N = 2^p \times 3^q$

Answer **………………………………… [1]**

iii. $N^2 = 2^p \times 3^q$

Answer **………………………………… [1]**

8 a) The number of goals scored in each of 50 football matches was recorded. The result is in the table

Number of goals scored	**0**	**1**	**2**	**3**	**4**	**5**	**6**
Frequency	**16**	**1**	**9**	**7**	**6**	**0**	**1**

For these results, find

i. The mode

Answer **……………………………….. [1]**

ii. The median

Answer **……………………………….. [1]**

iii. The mean

Answer **……………………………….. [2]**

b) Evaluate $(2.05 + 1.4) \times 0.2$

Answer **……………………………….. [1]**

c) Evaluate $1\frac{1}{3} - \frac{4}{5}$

Answer **……………………………….. [1]**

9 a) Complete the table,

Fractions		Decimals		Percentage
$\frac{1}{2}$	=	0.5	=	50%
$\frac{3}{20}$	=	…………..	=	………..
…………	=	……………..	=	62.5%

Answer ………………………………. **[2]**

b) The table shows some information about the temperature In a city.

Date	Maximum Temperature	Minimum Temperature
1 February	$-10\ C^0$	$T\ C^0$
1 March	$4\ C^0$	$-5\ C^0$

i. **Find the difference between the maximum and minimum temperature on 1 March.**

Answer ………………………………. **[1]**

ii. **The minimum temperature, $T\ C^0$, on 1 February was 13 degree lower than the minimum temperature on 1 March, find T.**

Answer ………………………………. **[1]**

10 a) Express 96 as a product of prime factors.

Answer ………………………………. **[1]**

b) 24 is a common factor of 96 and the integer n. Given that n is less than 96, find the possible value of n.

Answer ………………………………. [1]

11 a) The table shows information about some flights from Dubai to Mumbai

Departs Dubai (local Time)	03 30	16 10	21 55
Arrives Mumbai (local Time	08 10		02 30
Flight Duration	3 hours 10 minutes	2 hours 55minutes	3 hours 5 minutes

i. Work out the time difference between Dubai and Mumbai.

Answer ………………………………. [1]

ii. Work out the local time in Mumbai when the 16 10 flight arrives.

Answer ………………………………. [1]

b) y is directly proportional to the square of x. When $x = 10, y = 20$,

find the value of y when $x = 6$.

Answer ………………………………. [2]

12 a) Solve the simultaneous equations. $\boldsymbol{6x + y = 1}$

$$\boldsymbol{4x - y = 4}$$

***Answer* x= ……………………………. [1]**

***Y=*……………………………. [1]**

b) Simplify.

i. $\frac{5x^7y}{15\,x^3y^4}$

***Answer* ………………………………. [1]**

Ii. $\left(\frac{4\,t^2}{v^4}\right)^{\frac{-1}{2}}$

***Answer* ………………………………. [1]**

iii. **Solve** $3^{2x} = 81$

***Answer* ………………………………. [1]**

13 a) Write these values in order of size, starting with the smallest.

$$2^5 \quad , \quad 5^2 \quad , \quad \sqrt[3]{1000} \quad , \quad 27^0$$

Answer **………………, ………………, ……………. , …………… [1]**

b) Write down on possible value of x that satisfies each inequality.

i. $2 < \sqrt{x} < 3$

Answer **……………………………….. [1]**

Ii $-1 < x^3 < 0$

Answer **……………………………….. [1]**

14 The coordinates of midpoint of the line AB are $(1, 2)$. The length of the line is 10 units.

a) If the gradient of AB is 0, find the coordinates of points A and B.

Answer (**…………, …………… *)*[1]**

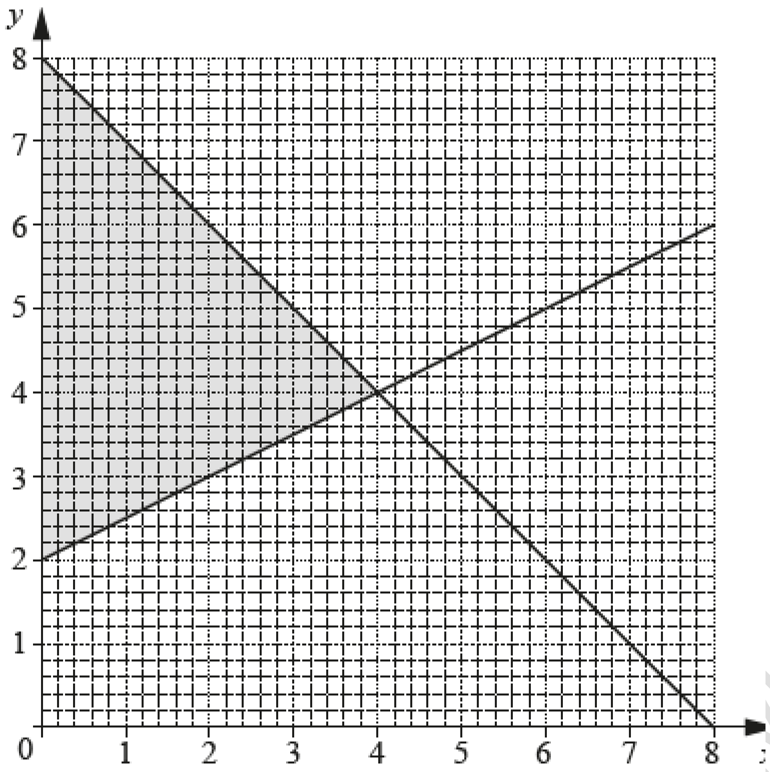
(**…………, ……………*)* [1]**

b) **If the gradient of AB is $\frac{3}{4}$, find the coordinates of A and B.**

Answer *(…………, ……………)*[1]

(…………, ……………) **[1]**

15 The diagram shows the lines $x + y = 8$ and $2y = x + 4$



a) **The shaded region on the diagram is defined by three inequalities. Write down these three inequalities.**

Answer **………………………………. [1]**

………………………………. [1]

………………………………. [1]

b) **Another region R, is defined by the inequalities $x + y \leq 8$, $2y \leq x + 4$ and $y \geq a$, where a is an integer. This region contains 5 points with integer coordinates. Write down the value of a.**

Answer ***a*****=……………………………. [1]**

16 a) Anil has some sweets with a mass of 600 g, correct to the nearest 10 grams. Write down the lower bound of the mass of sweets.

Answer **……………………………….. [1]**

b) i. Make p the subject of the formula $t = \frac{p+3}{p-4}$

Answer **……………………………….. [2]**

Ii Simplify fully $\frac{4x^2-1}{2x^2-9x-5}$

Answer **……………………………….. [2]**

c) Evaluate 0.2×0.08

Answer **……………………………….. [1]**

d) Evaluate $3 \div 27 \times 9$

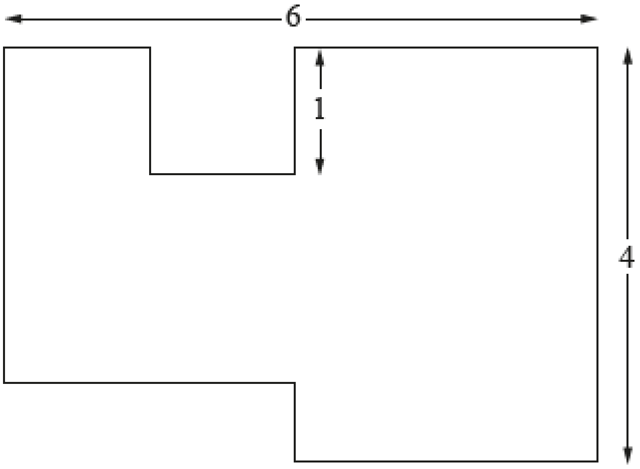
Answer **……………………………….. [1]**

e) Add one or more brackets to make the statement below true.

$2 \times 3 + 4 \times 5 = 70$

Answer **……………………………….. [1]**

17 a) Find the perimeter of the shape below. All the angles are right angles. All the lengths are in centimeters.



Answer ……………………………….. **[1]**

b) **Write 248.367**

i. Correct to 2 decimal places.

Answer ……………………………….. **[1]**

Ii Correct to 2 significant figure.

Answer ……………………………….. **[1]**

c) Estimate, correct to the nearest whole number, the value of $\sqrt[3]{8.36} + \sqrt[3]{63.58}$

Answer ……………………………….. **[1]**

18 a) Solve the simultaneous equations. $2x + 3y = 5$

$$3x - y = -9$$

Answer x= …………………………… *Y=*……………………………. **[1]**

b) Evaluate $\frac{3}{5} - \frac{1}{8}$

Answer **……………………………….. [1]**

C) Find A where $A \times \frac{3}{7} = \frac{2}{5}$

Answer **……………………………….. [1]**

d) Find the fraction which is exactly half way between $\frac{5}{8}$ and $\frac{2}{3}$

Answer **……………………………….. [1]**

19 a) write 0.000186 **in standard form.**

Answer **……………………………….. [1]**

b) $s = 1.3 \times 10^7$ $t = 8 \times 10^8$ **Giving each answer in standard form.**

i. t^2

Answer **……………………………….. [1]**

Ii $t - s$

Answer **……………………………….. [1]**

C Given that $a = 3$ and $b = -7$**, evaluate**

i. $2a - b$

Answer **……………………………….. [1]**

ii. $a^2 + b^2$

Answer **……………………………….. [1]**

iii. $\boldsymbol{A = 2r^2 + 5}$, Rearrange the formula to make r the subject..

Answer **………………………………. [2]**

20 a) Evaluate $\boldsymbol{3^{-2}}$

Answer **………………………………. [1]**

b) Evaluate $\boldsymbol{125^{\frac{2}{3}}}$

Answer **………………………………. [1]**

C) Simplify $\boldsymbol{\left(\frac{2\,a^2\,b^5}{18\,a^4\,b}\right)^{\frac{1}{2}}}$

Answer **………………………………. [2]**

21 a) By writing each number correct to one significant figure, estimate the value of $\boldsymbol{\frac{58.7 \times 4.08}{19.7^3}}$

Answer **………………………………. [2]**

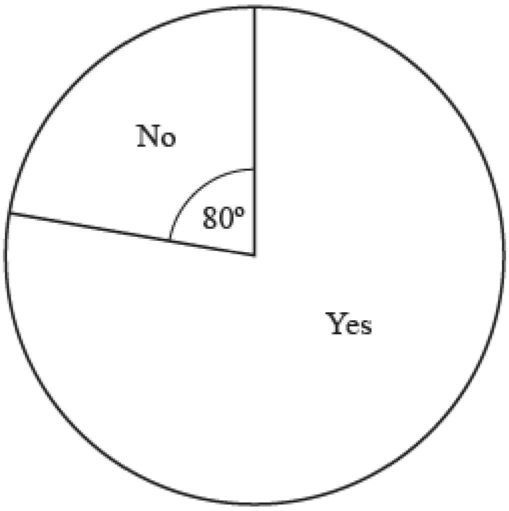
b) Here are the masses, in grams of 8 apples. $189,\ 175,\ 185,\ 192,\ 202,\ 161,\ 174,\ 196$

Find the median mass and Range of the data given above.

***Answer* ………………… *grams* [1]**

……………………………….. [1]

22 a) A group of students were asked if they wanted a later start to the school day. The pie chart summarises the results. 200 students said no. work out the number of students who said yes.



***Answer* ……………………………….. [2]**

b) A bag contains 5 carrots. The mean mass of the carrots is 60 g. Another carrot is added to the bag.

The mean mass of the 6 carrot is 65 g. Workout the mass of the carrot added to the bag.

***Answer* ……………………………… *g* [2]**

M Ijaz Khan(BSS-CSP... Phil Math)

c) Write 54 as a product of its prime factors.

Answer **……………………………….. [1]**

d) Fins the smallest possible integer m such that $54m$ is a cube number.

Answer **……………………………….. [1]**

23 a) Find the value of K in each of the followings.

i. $\sqrt{27} = 3^k$

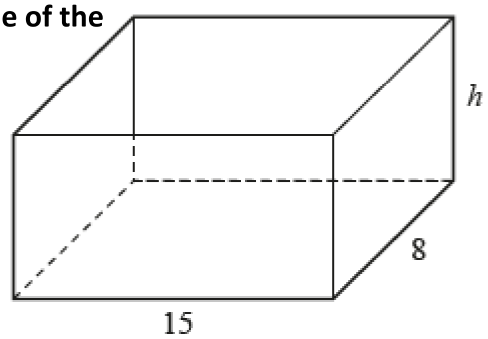
Answer **……………………………….. [1]**

ii. $\left(\frac{1}{4}\right)^{-3} = 2^k$

Answer **……………………………….. [1]**

b) A container is made out of thin material in the shape of a cuboid with an open top.

The container has length 15 cm and width 8 cm. The volume of the Container is $720\ cm^3$.



i. Calculate the height , h cm, of the cube.

***Answer* ……………………………….. [2]**

ii. Calculate the surface area of the outside of the container.

***Answer* ……………………………….. [2]**

iii. Liquid is poured into the container. The liquid fills 60% of the container. Calculate the height of the liquid in the container.

***Answer* ……………………………….. [1]**

24 a) Solve $\frac{7x}{4-3x} = 3$

Answer **……………………………….. [2]**

b) Simplify fully $\frac{4x^2-9}{2x^2-13x+15}$

Answer **……………………………….. [2]**

25 a) Evaluate the followings:

i. $\frac{3.5-1.9}{0.8}$

Answer **……………………………….. [1]**

ii. $9 + 6 \div 3 - 4$

Answer **……………………………….. [1]**

b) Workout $15\%\ of\ 80$

Answer ………………………………. **[1]**

c) Workout $\frac{3}{5}-\frac{2}{7}$

Answer ………………………………. **[1]**

d) Write these numbers in order of size, starting with the smallest.

$\frac{1}{3}$, 0.32 , $\frac{15}{40}$, 0.3 , $\frac{9}{31}$

Answer ……………, ……………, ………….., ……………, …………. **[2]**

26 A plane leaves London on a flight to Dubai.

a) The plane lands in Dubai where the local time is 17 20. The flight time is 6hours 50 minutes. The local time in Dubai is 3 hours ahead of the local time in London. Calculate the local time in London when the flight left.

Answer ………………………………. **[2]**

b) At one time during the flight the temperature inside the plane is $17\ ^0C$. The temperature outside the plane is $-43\ ^0C$. Work out the difference between the inside and outside temperature.

Answer ………………………………. **[1]**

c) The plane leaves London where the temperature outside is $17\,^{0}C$. The plane rises to a height where the temperature outside is $-43\,^{0}C$. The temperature decreases by $2\,^{0}C$ with every increase of 300 m in height. Calculate the increase in height of the plane.

Answer **………………………………. [1]**

27 Usama recorded the number of items bought by each of 20 customers at a shop.

Number of items Bought	**1**	**2**	**3**	**4**	**5**	**6**
Number of Customers	**3**	**0**	**5**	**3**	**7**	**2**

a) Write down the mode.

Answer **………………………………. [1]**

b) Find the median number of items bought.

Answer **………………………………. [1]**

c) Calculate the mean number of items bought.

Answer **………………………………. [1]**

d) Usama draws a pie char to show data. Calculate the angle of sector on the pie chart which represents the number of people who bought 3 items.

Answer **………………………………. [1]**

28 a) Factorize Completely.

i. $2ax - 3by + 6bx - ay$

Answer ………………………………. **[2]**

ii. $27x^2 - 3y^2$

Answer ………………………………. **[2]**

b) Evaluate $3^3 - 3^0$

Answer ………………………………. **[1]**

c) Simplify completely $\left(\frac{9a^3b^3}{16\,b\,a^5}\right)^{\frac{1}{2}}$

Answer ………………………………. **[2]**

29 a) Show that $\frac{12}{x+2}+\frac{10}{x-1}=\frac{7}{2}$ **can be simplified to give the equation** $7x^2-37x-30=0$

Answer **………………………………. [3]**

b) Solve by factorization, $7x^2-37x-30=0$ **[hint 42x5=210 & -42+5=-37]**

Answer $x=$**…………………… *OR*** $X=$**………….. [3]**

30 a) Evaluate

i. $\frac{4}{11}-\frac{2}{7}$

Answer **………………………………. [1]**

ii. $\mathbf{0.9 \times 0.011}$

Answer **……………………………….. [1]**

b) Cecil bought a camera for \$120. After two years he sold it for \$90. Calculate the percentage loss.

Answer **……………………………….%. [1]**

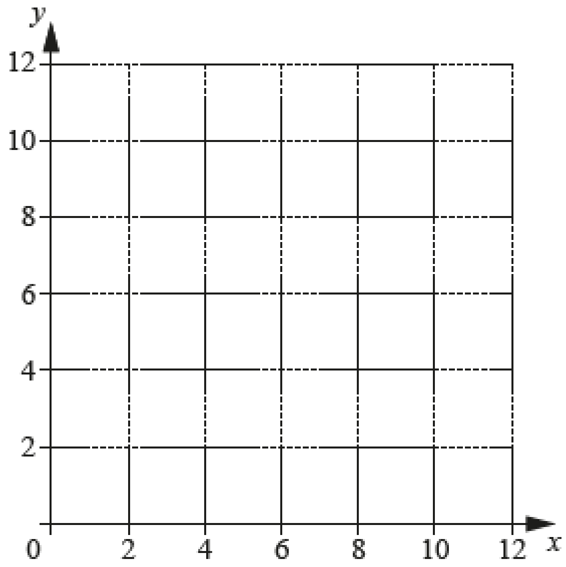
31 a) Some money is shared between Miriam and Nina in the ratio $\mathbf{2:3}$. What percentage of the total money shared does Miriam receive?

Answer **……………………………….. [1]**

b) Given that $\boldsymbol{a:b = 5:6 \ \ and \ \ b:c = 3:8, \ \ find \ \ a:b:c}$

Answer **……………………………….. [1]**

32 a)



The region R is defined by the inequalities $\mathbf{2 \le x \le 8}$

$$\mathbf{5 \le y \le 10}$$

$$\mathbf{x + y \ge 10}$$

On the diagram, shade and label the region R

***Answer* ………………………………. [3]**

b) A rectangle has length $64\ mm$ and width $37\ mm$ each correct to the nearest millimeter.

i. Write down the lower bound for the length.

***Answer* ………………………………. *mm*[1]**

Ii Calculate the lower bound for the perimeter of the rectangle.

***Answer* ……………………………*mm* [1]**

33) a) Find the value of i) $28 \div 3\frac{1}{2}$ ii) 0.3×0.02 [1+1]

b) Express $\frac{13}{40}$ as a decimal [1]

c) Express 0.052 square meter in square centimeter. [1]

34 a) Express 90 as the product of its prime factors. [1]

b) The lowest common multiple of $6, 15$ and x is 90. Find the two possible value of $'x'$ which are odd numbers. [2]

c) Find the value of $35 \div 2\frac{1}{3}$ [1]

35 a) Evaluate 0.03×0.11 **[1]**

b) The paper on a roll is 4.5 m long. Marry cuts as many pieces as possible, each of length 60cm, from the roll.

i) Calculate the number of pieces. **[1]**

ii) Calculate the length of paper that remains on the roll. **[1]**

36 a) One kilogram of tea cost $\$16$. Calculate the cost of 300grams of tea. **[1]**

b) Find simple interest on $\$400$ for three years at 2% per annum. **[1]**

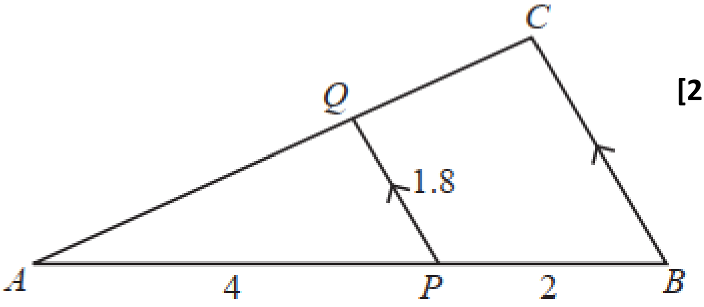
c) Write the number 357.864 correct to 2 significant figures. **[1]**

37 a) Interior angle of a regular polygon is 171^0. Find the number of sides of the polygon. **[1]**

b) Write the number 450000000 in standard form. **[1]**

38 In similar triangles APQ and ABC

a) Find BC **[2]**



b)Find $\dfrac{Area\ of\ triangle\ APQ}{Area\ of\ quadrilateral\ PBCQ}$ **[2]**

39 a) Factorize completely $5 - 20t^2$ **[1]**

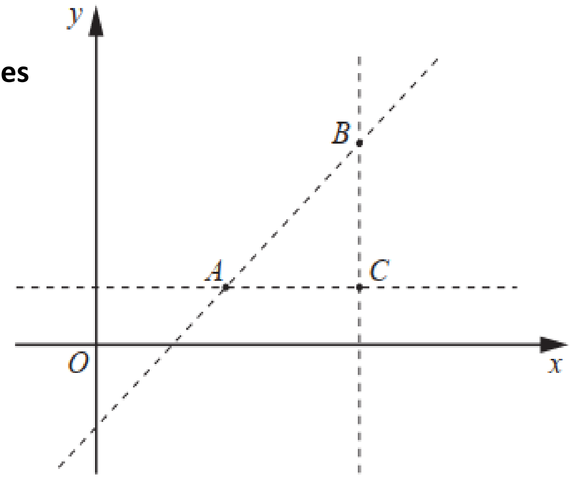
b) Factorize completely $3y^2 - 2xy - 6x + 9y$ **[2]**

M Ijaz Khan(BSS-CSBC)[Math]

40 A is the point $(5,2)$ and B is the point $(9,6)$.

AC is parallel to X-axis and BC is parallel to Y-axes

a) Find the coordinates of C. **[1]**



b) The region inside the triangle ABC is defined by three inequalities. Write the three inequalities. **[3]**

c) Write the equation of the line perpendicular to AB passing through point C. **[2]**

41 a) Given that $192 \times 64.3 = 12345.6$, write down the values of

i) $0.192 \times 643 =$ **[1]**

ii) $\frac{12.3456}{192}$= **[1]**

b) i)write the number 513000 in standard form. **[1]**

ii) Evaluate $(4 \times 10^{-5})(6 \times 10^{-4})$, write the answer in standard form. **[1]**

42 a) Some money is shared between Ali, Ben and Carl in the ratio $5:3:2$. Ben receives $6

How much money is shared? **[2]**

b) Express the ratio $3\frac{1}{2}$ $hours : 14\ minutes$ in the form $k : 1$. **[1]**

43a)A box has mass of $1.7Kg$, correct to the nearest $0.1Kg$.

write down the lower bound for the mass of the box. **[1]**

b)The box hold 100 jars. Each jar has a mass of 140grams, correct to the nearest 10grams.

Calculate the lower bound of the total mass of the box and 100 jars. Give your answer in kilogram. **[2]**

44 a) Write $\frac{23}{5}$ as a mixed number. **[1]**

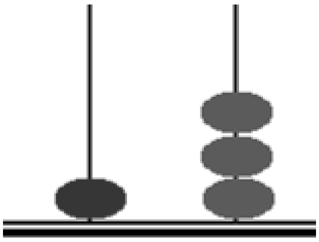
b) Work out $\frac{3}{8} \div 6$ **[1]**

c) Evaluate $2 - 1.2 \times 0.3$ **[1]**

d)Factorize $4p^2 - 1$ **[1]**

45a) Solve the equation $9 - 5x = 2x - 12$ **[1]**

b) Write down the possible two digits numbers you can make from this abacus. **[2]**



____

46a) Express $\frac{1}{3}\ Km/second$ **into** km/h **[1]**

b)Write down the equation of straight line which passes through $(2\ ,3)$ **and having the same gradient as the line** $2y = x + 4$ **[2]**

c) Evaluate 201×199 **by using identity** **[2]**

47a)Evaluate $\sqrt{160000}$ **[1]**

b) Evaluate $1 - 3^{-1}$ **[1]**

c)Write $\frac{48\ minutes}{2\ hours\ 18\ minutes}$ **as a fraction in its simplest form.** **[2]**

48a)By writing each number correct to 1 significant figure, estimate the value of

$\frac{6013\times0.0405}{\sqrt{8.986}}$ **[2]**

b)Express 0.043×100^2 **in standard form.** **[1]**

c)Evaluate $\frac{1.2\times10^7}{2\times10^{-3}}$ **, giving your answer in standard form.** **[2]**

49 a) ______________, 1.4 **,** 2.3 **,** 3.2**, ____________ fill in the missing numbers.** **[1]**

b) Write $\frac{11}{25}$ **as a percentage.** **[1]**

50 a) Find $12\%\ of\ 40$ **[1]**

c) Write the ratio $75g : 3Kg$ **in simplest form.** **[1**

#	part	Answer
1	a	6
	b	0.45
	c	1/24
	d	3/7
2	a	02 25 net day
	b	3150 km
3	a	530 grams
	b	88 steps/ minute
4	a	3.4×10^{-5}
	b	33.7×10^{-6}, 0.034×10^{-3}, 4.2×10^{-5}
5	a	600
	b	$y \geq -x, \quad y \leq 3$
6	a	$(x-4)(3y+5)$
	b	$2^2 \times 5^3$
7	a	$x = -2, \; y = \frac{-3}{2}$
	b(i)	$2^5 \times 3^4$
	(ii)	$2^{-3} \times 3^0$
	(iii)	$2^8 \times 3^4$
8	a(i)	0 (zero)
	(ii)	Median is average of 25th and 26th position value which is 2.
	(iii)	1.4
	b	0.69
	c	8/15
9	a	0.15, 15% 5/8 0.625
	b(i)	9^0
	(ii)	-18^0
10	a	$2^5 \times 3^1$
	b	72
11	a(i)	**2hrs** (08 10 – 03 30) – 3hrs 10 minutes
	(ii)	**21 05** (16 10 + 2h 55minutes) +2hrs
	b	$y = .2\,x^2$, y = 7.2
12	a	X= ½ , y = -2
	b(i)	$\frac{x^4}{3y^3}$
	(ii)	$\frac{v^2}{2t}$
	(iii)	X=2
13	a	27^0 , $\sqrt[3]{1000}$, 5^2 , 2^5
	b(i)	Either 5 or 6 or 7 or 8
	(ii)	
14	a	A(-4, 2) B(6, 2)
	b	A(-3, -1) B(5, 5)
15	a	$x \geq 0$, $y \geq \frac{1}{2}x + 2$, $y \leq -x + 8$
	b	a=1
16	a	550 grams hint(600-10/2)
	b(i)	$p = \frac{(4t+3)}{(t-1)}$
	(ii)	$\frac{(2x-1)}{(x-5)}$
	c	0.016
	d	1
	e	$2 \times (3 \; + \; 4) \times 5 \; = 70$
17	a	22
	b(i)	248.37
	(ii)	250
	c	6
18	a	X = -2 , y = 3
	b	19/40
	c	14/15
	d	31/48
19	a	1.86×10^{-4}
	b(i)	6.4×10^{17}
	(ii)	7.87×10^{8}
	c(i)	13
	(ii)	58
	(iii)	$r = \sqrt{\frac{A-5}{2}}$
20	a	1/9
	b	25
	c	$\frac{b^2}{3a}$
21	a	0.03
	b	Median: 187 , Range : 41
22	a	700
	b	90 gram
	c	$2^1 \times 3^3$
	d	6
23	a(i)	3/2
	(ii)	K = 6
	b(i)	h = 6
	(ii)	396 cm^2
	(iii)	3.6 cm (0.6x6)

#	part	
24	a	0.75 or ¾
	b	$\frac{(2x+3)}{(x-5)}$
25	a(i)	2
	(ii)	7
	b	12
	c	11/35
	d	$\frac{9}{31}$, 0.3 , 0.32 , $\frac{1}{3}$, $\frac{15}{40}$
26	a	07 30
	b	60^0
	c	9000 m or 9 km high
27	a	Mode: 5
	b	4
	c	3.85
	d	90^0
28	a(i)	$(2x-y)(a+3b)$
	(ii)	$3(3x-y)(3x+y)$
	b	26
	c	$\frac{3b}{4a}$
29	a	$\frac{12(x-1)+10(x+2)}{(x+2)(x-1)} = \frac{7}{2}$
	b	$X = 6 \text{ or } x = -5$
46	a	1200 km/h [$\frac{1}{3} \div \frac{1}{3600}$]
	b	$Y = \frac{1}{2}x + 2$
	c	39999 hint :[(200+1)(200-1)] $200^2 - 1^2$ 40000 -1 = 39999
47	a	400
	b	2/3
	c	8/23
48	a	$\approx \frac{6000\times0.04}{\sqrt{9}} = \frac{6000\times4}{300} = 80$
	b	4.3×10^2
	c	6×10^9
49	a	0.5, , , , 4.1
	b	44%
50	a	4.8
	b	1 : 40

#	part	
30	a(i)	6/77
	(ii)	0.0099
	b	25%
31	a	40%
	b	$a\!:\!b\!:\!c = 5 : 6 : 16$
32	a	Bound the required region
	b(i)	$l = 63.5\ mm$
	(ii)	Perimeter: 200 mm
33	a(i)	8
	(ii)	0.006
	b	0.325
	c	5200 cm^2
34	a	$2^1 \times 3^2 \times 5^1$
	b	9 and 45
	c	15
35	a	0.0033
	b(i)	7
	(ii)	30 cm or 0.3m
36	a	$ 4.8
	b	$ 24
	c	360
37	a	$\frac{360}{an\ ext.angle} = \frac{360}{9} = 40$
	b	4.5×10^8
38	a	BC= 2.7
	b	$\frac{16}{36-16} = \frac{16}{20} = \frac{4}{5}$
39	a	$5(1-2t)(1+2t)$
	b	$(y+3)(3y-2x)$
40	a	$C\ (9, 2)$
	b	$x < 9$, $y > 2$, $y < x - 3$
	c	$y = -x + 7$ or $x + y = 7$
41	a(i)	**123.456** re-place decimal two digits behind
	(ii)	0.643
	b(i)	5.13×10^5
	(ii)	2.4×10^{-8}
42	a	$(10 + 6 + 4) = \$\ 20$ [hint 6/3 = 2]
	b	15 : 1 [k=15]
43	a	1.65 kg
	b	15.15 kg [$135 \times 100 \div 1000 + 1.65$]
44	a	$4\frac{3}{5}$
	b	$\frac{1}{16}$
	c	0.24
	d	$(2p+1)(2p-1)$
45	a	$x = 3$
	b	13, 22, 31, 40

M Ijaz Khan(BSS-CSC)(M. Phil Math)